Track surface (inches)	Class of track				
	1	2	3	4	5
The deviation from uniform profile on either rail at the mid-ordinate of a 31-foot chord may not be more than	N/A[1]	N/A[1]	1	1	1
The deviation from uniform profile on either rail at the mid-ordinate of a 62-foot chord may not be more than	2¼	2¼	1¾	1¼	1
The difference in crosslevel between any two points less than 10 feet apart (short warp) shall not be more than	2	2	1¾	1¾	1½

[1] N/A—Not Applicable.

[78 FR 16101, Mar. 13, 2013]

§213.65 Combined track alinement and surface deviations.

On any curved track where operations are conducted at a qualified cant deficiency, E_u, greater than 5 inches, the combination of alinement and surface deviations for the same chord length on the outside rail in the curve, as measured by a TGMS, shall comply with the following formula:

$$\frac{3}{4}\times\left|\frac{A_m}{A_L}+\frac{S_m}{S_L}\right|\leq 1$$

Where—

A_m = measured alinement deviation from uniformity (outward is positive, inward is negative).

A_L = allowable alinement limit as per §213.55(b) (always positive) for the class of track.

S_m = measured profile deviation from uniformity (down is positive, up is negative).

S_L = allowable profile limit as per §213.63(b) (always positive) for the class of track.

$$\left|\frac{A_m}{A_L}+\frac{S_m}{S_L}\right| = \text{the absolute (positive) value of the result of } \frac{A_m}{A_L}+\frac{S_m}{S_L}.$$

[78 FR 16102, Mar. 13, 2013]

Subpart D—Track Structure

§213.101 Scope.

This subpart prescribes minimum requirements for ballast, crossties, track assembly fittings, and the physical conditions of rails.

§213.103 Ballast; general.

Unless it is otherwise structurally supported, all track shall be supported by material which will—

(a) Transmit and distribute the load of the track and railroad rolling equipment to the subgrade;

(b) Restrain the track laterally, longitudinally, and vertically under dynamic loads imposed by railroad rolling equipment and thermal stress exerted by the rails;

(c) Provide adequate drainage for the track; and

(d) Maintain proper track crosslevel, surface, and alinement.

§213.109 Crossties.

(a) Crossties shall be made of a material to which rail can be securely fastened.

(b) Each 39-foot segment of track shall have at a minimum—